DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD		\$	DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD		RRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR
DDD DDD	TTT	SSS	DDD DDD	TIT	RRR RRR
DDD DDD	TTT	SSS	DDD DDD	iii	RRR RRR
DDD DDD	III	SSS	DDD DDD	III	RRR RRR
DDD DDD	TTT	SSS	DDD DDD	TIT	RRR RRR
DDD DDD	tit	22222222	000 000	titi	RRRRRRRRRRRRR
DDD DDD	TTT	SSSSSSSS	DDD DDD	ŤŤŤ	RRRRRRRRRRRR
DDD DDD	III	SSSSSSSS	DDD DDD	III	RRRRRRRRRRR
DDD DDD	III	SSS	DDD DDD	ĪĪĪ	RRR RRR
DDD DDD	111	SSS	DDD DDD	TIT	RRR RRR RRR RRR
DDD DDD	ήή	ŠŠŠ	DDD DDD	ttt	RRR RRR
DDD DDD	TTT	SSS	DDD DDD	TTT	RRR RRR
DDD DDD	III	SSS	DDD DDD	III	RRR RRR
DDDDDDDDDDDD	III	22222222222	DDDDDDDDDDD	III	RRR RRR
DDDDDDDDDDDDDDDD	111	\$		111	RRR RRR

Pe

_8

To

To

17 A

LI

DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD	TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	\$	PPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP	RRRRRRRR RRRRRRRR RR RR RR RR RR RR RRRRRR	\$	
		\$				

TSTSDTSPARS Table of co	SE ontents	- PARSE DTS COMMAND LINE	G	5	16-SEP-1984	01:25:31	VAX/VMS
(2) (3) (4) (5) (6) (7) (8)	42 188 296 352 549 630 688	DECLARATIONS TST\$PARSE - COMMAND PARSE ROUTINE PARSE ROUTINEPARAMETER EVALUATION AND PARSE ROUTINEQUALIFIER EVALUATION PARSE ROUTINEQUALIFIER VALUE EVALUATION TST\$NEXTCHAR - EXAMINE NEXT CHARACTER TST\$MATCH - KEYWORD MATCH ROUTINE TST\$CVTU_DTB - CONVERT UNSIGNED DECIMAL					

Macro V04-00

16-SEP-1984 01:25:31 VAX/VMS Macro V04-00 5-SEP-1984 00:22:35 EDTSDTR.SRCJDTSPARSE.MAR;1

Page (1)

.TITLE TST\$DTSPARSE - PARSE DTS COMMAND LINE .IDENT 'V04-000'

COPYRIGHT (c) 1978, 1980, 1982, 1984 BY DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS. ALL RIGHTS RESERVED.

THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY TRANSFERRED.

THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT CORPORATION.

DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.

FACILITY: DTS/DTR DECNET TEST PACKAGE

H 5

ABSTRACT: THIS MODULE PARSES A COMMAND LINE INPUT BY DTS.

ENVIRONMENT: DTS/DTR RUN IN USER MODE AND REQUIRE NETWORK PRIVILEGE.

AUTHOR: JAMES A. KRYCKA, CREATION DATE: 11-AUG-77

MODIFICATIONS:

		TST		COMMAND LINE 16-SEP-1984 01:25:31 VAX/VMS Macro V04-00 Parse ROUTINE 5-SEP-1984 00:22:35 EDTSDTR.SRCJDTSPARSE.MAR;1	ge
			0002 0002 0002 0002	117: 118: DETERMINE IF THE NEXT SYNTACTICAL ELEMENT OF THE COMMAND LINE IS A 119: PARAMETER OR QUALIFIER, OR IF THE END OF THE INPUT LINE HAS BEEN 120: REACHED. 121:	
	02	7 30	0002 0002 0002 0005 0005	122 123 NEXT_ELEMENT: 124 125 REEXAMINE_CHAR: 126 126 127 128 128 128 129 120 120 120 121 120 121 122 123 124 125 REEXAMINE_CHAR: 126 127 128 128 128 129 120 120 120 120 120 121 120 120 120 120	
			0005 0005 0005 0005 0005	128 129 PARSE_ERROR- 130 SPACE_OR_TAB- 131 PARAM= SLASH EQUAL_SIGN OR COLON SPACE_OR_TAB- NONE OF THE ABOVE	
			0013 0013 0013 0013 0013	134 : 135 : A SPACE OR TAB HAS BEEN ENCOUNTERED. THIS IMPLIES THAT A QUALIFIER (/) 136 : CAN NOT IMMEDIATELY FOLLOW. ANOTHER SFACE OR TAB, A PARAMETER, OR A 137 : QUALIFIER MAY FOLLOW. 138 : 139 140 SPACE_OR_TAB:	
	5B	08 88 EA 11	0013	140 SPACE_OR_TAB: 141 BISB2 #FLG_M_DELIMITER,R11 ; SET DELIMITER FLAG 142 BRB NEXT_ECEMENT ; CONTINUE 143 144 ;	
			0018 0018 0018 0018	145 : A QUALIFIER FOLLOWS. DISCARD THE SLASH DELIMITER AND PROCEED. 146 : 147 148 QUAL:	
16	5B 00	03 E0 FD 30 E4 11	001C	149 150 150 151 151 152 152 153 BBS #FLG V DELIMITER,R11,- PARSE ERROR SPACE OR TAB PROCESS QUALIFIER PROCESS QUALIFIER PROCESS QUALIFIER DELIMITER PROCESS QUALIFIER DELIMITER	
			0021 0021 0021 0021	BRB. REEXAMINE_CHAR : PROCESS QUALIFIER DELIMITER 153 154: 155: A PARAMETER FOLLOWS. THE COMMAND CAN HAVE ONLY ONE PARAMETER. 156: 157 158 PARAM: 159 BBSS #FLG_V_PARAMETER,R11,- : ERROR IF NOT FIRST PARAMETER	
15	5B	02 E2	0021	158 PARAM: 159 BBSS #FLG_V_PARAMETER,R11,- ERROR IF NOT FIRST PARAMETER	
	58	08 8A 14 10 09 11	0025 0028 002A 002C	BBSS #FLG V PARAMETER,R11,- PARSE ERROR BICB2 #FLG M DELIMITER,R11 BSBB PARAMETER BRB REEXAMINE_CHAR THE END OF THE LINE HAS BEEN REACHED. SET FLAG IF THE COMMAND LINE	
			002C 002C 002C	167 : REQUIRES ANOTHER LINE OF INPUT: OTHERWISE, DETERMINE WHETHER THE	
	20	51 91 05 13	002¢ 002¢ 002F	168 : REQUIRED PARAMETER HAS BEEN RECEIVED. 169 : 170 : 171 END_OF_LINE: 172 CMPB R1,#^A/-/ 173 BEQLU 10\$: YES	

(3)

TSTSDTSPARSE

TSTSDTSPARSE V04-000			TST	ARSE DTS	COMMAN	D LINE D PARSE ROUT!	L 5 16-SEP-1984 0 5-SEP-1984 0	31:2	5:31 VAX/VMS Macro VO4-00 2:35 EDTSDTR.SRCJDTSPARSE.MAR;1	Page	(3)
	05 5B	02	E5	0031	174	BBCC	#FLG V PARAMETER, R11,- PARSE_ERROR	• :	IT IS AN ERROR IF NO PARAMETER HAS BEEN PROCESSED		
	58	02	04 88 04	0035 0036 0039 003A	176 177 10 178 179	S: RET BISB2 RET	#FLG_M_MULTILINE,R11		EXIT TO DISMAIN SET CONTINUATION FLAG EXIT TO DISMAIN		
				003A 003A 003A	180 ; 181 ; 182 ; 183 ; 184 PA	AN ERROR HAS	BEEN ENCOUNTERED DURING	G COI	MMAND LINE PARSING.		
	5B	01	88 04	003A 003A 003D	184 PA 185 186	RSE_ERROR: BISB2 RET	#FLG_M_PARSERROR,R11	:	CONTROL POINT SET PARSE ERROR FLAG EXIT TO DISMAIN		

MOVB

90 90 68

05

90

00

0000°CF

0000°CF

0000°CF

00409000 8F

SELECTOR=R10.DISPL=<-**SCASEB** CONNECT TEST DATATEST-DATA TEST DISCONNECT TEST DISCTEST-INTETEST-MISCELLANEOUS TEST MISCTEST-#DFT_K_RETURN_CO_W^TST\$GB_RETURN; RETURN QUALIFIER
#DFT_K_TYPE_CO_W^TST\$GB_TYPE; TYPE QUALIFIER
#VLD_M_NORETURN!VLD_M_RETURN!VLD_M_TYPE.!VLD_M_TYPE.W^TST\$GL_VALID CONNTEST: MOVB MOVB BISL2 RSB EXIT DATATEST: DEFAULTS FOR:

#DFT_K_BACK, W^TST\$GB_BACK

: BACK PRESSURE CONTROL

TST\$DTSPA	RSE			- PA PARS	RSE DT	S COM	MAND LINE PARAMETER	EVALUA	N 5 TION AND	16-SEP-1984 5-SEP-1984	01:25:31 00:22:35	VAX/VMS EDTSDTR	Macro VO4-00 .SRCJDTSPARSE.MAR;1	Page
	0000	0000 CF 0000 CF 0000 CF 0000 CF 0000 CF 0000 CF	02 00 01 86 00 00	90 90 90 90 90 90 90 8	00A7 000B0 000B0 000C0 000C0 000C0 000C0 000C0 000C0	24444555555555666666678 222222222222222222222222222222		MOVB MOVB MOVB MOVL MOVB BISL2	WDFT K RO WDFT K SI WDFT K SI WDFT K TI	QUEUE DA WAT IME DA, WATST YPE DA, WATST YPE DA, WATST ACK- OURS- INUTES- OBACK- OFLOW- ONAK-	NAK ST\$GB_RQUI \$GW_STZE ST\$GB_SQUI \$GL_SECONI	EUE; NAK EUE; DTR ; MESS EUE; DTS DS; DATA ; TYPE	QUALIFIER	
	0000°CF	0057067D	8F	05	00CD 00CD 00D5	264 265 266			LVLD M TY W TSTSGL RSB	VALID	EXI	,		
		0000°CF	00 01	90 90 68	00D6 00D6 00DB 00E0 00E1	267 268 269 270 271		: MOVB MOVB BISL2		ETURN DI WAT YPE DI WATST DRETURN- ETURN-	STSGB RETU	URN; DEFA	ULTS FOR: URN QUALIFIER QUALIFIER QUALIFIERS:	
	0000°CF	00409000	8F	05	00E1	272 273 274			LVLD M TY WATSTSGL	VALID	EXI	,		
		0000°CF 0000°CF 0000°CF 0000°CF	01 10 01 1E 00	90 90 00 90 08	00E9 00EA 00EF 00F4 00F9 0103 0104 0104	275 276 277 278 279 281 283		HOVB MOVB MOVB MOVB BIS'2	#DFT_K_RG	QUEUE IN WAT IZE IN WATST QUEUE IN WATST YPE IN WATST YPE IN WATST OURS- INUTES- QUEUE- ECONDS- IZE- QUEUE-	STSGB ROUI	EUE : DEFA EUE : DTR : MESS	ULTS FOR: QUEUE COUNT AGE SIZE QUEUE COUNT RRUPT TEST DURATION QUALIFIER QUALIFIERS:	
	0000°CF	00570018		05	0104 0104 0104 0104 0106 0100	27901233456789012334 228288889012334 22828889999999999999999999999999999999	MISCTEST		NATSTSGL.	VALID	EXI	,	ULTS FOR:	
		0000°CF 00400000 0000	BF CF	90 C8 05	010D 0112 0118 0118	291 292 293		MOVB BISL2 RSB	WOFT K TY WVLD M TY W TSTSGL	YPE_MI,W^TST YPE,- VALID	SGB_TYPE DENG		ULTS FOR: QUALIFIER QUALIFIERS:	

03

			011C 011C 011C 011C 011C 011C	297 298 QUALIFIER IS A 299 A PARAMETER QUA 300 AND THE ASSOCIA	PARSE ROUTINEQUALIFIER SPECIAL PURPOSE SUBROUT ALIFIER. THE QUALIFIER S ATED QUALIFIER VALUE (IF	EVALUATION INE TO PARSE A COMMAND QUALIFIER OR TRING IS STORED IN TSTSGT_KEYWORD ANY) IS STORED IN TSTSGT_VALUE.
52	0000°CF	DE D4	011C 011C 011C 011C 011C 012S 012A 012C	305 306 307 MOVAL	OST=W^TST\$GT_KEYWORD- SIZE=#12- CHAR=<#^A/ /> W^TST\$GT_KEYWORD,R2	CONTROL POINT FILL KEYWORD AND QUALIFIER VALUE STRINGS WITH SPACES NOTE RO-R5 ARE DESTROYED! GET ADDRESS OF BUFFER ZERO CHARACTER COUNT
	01CD	30	012C 012F 012F 012F 012F 012F 012F	310 BSBN 1 311 QUAL REEXAMINE:	SELECTOR=RO,DISPL=<- QUAL_DELIMITER- QUAL_DELIMITER- QUAL_VALUE- QUAL_DELIMITER- QUAL_CHAR-	GET NEXT CHARACTER CHARACTER: END-OF-LINE SLASH EQUAL_SIGN OR COLON SPACE OR TAB NONE OF THE ABOVE
52	0000°CF 53 0185	DE D4 30	012F 013D 013D 0142 0144 0147 0147 0147 0147	319 QUAL_VALUE: 320	ATSTSGT_VALUE,R2 STSNEXTCHAR SELECTOR=R0,DISPL=<- QUAL_REEXAMINE- QUAL_REEXAMINE- VALUE_CHAR- VALUE_CHAR- VALUE_CHAR-	DISCARD THE EQUAL SIGN OR COLON GET ADDRESS OF QUALIFIER VALUE ZERO CHARACTER COUNT GET NEXT CHARACTER CHARACTER CHARACTER: END-OF-LINE SLASH EQUAL SIGN OR COLON SPACE OR TAB NONE OF THE ABOVE
	08 53 EA 82 51 53 E3 04 53 C6 82 51	D1 13 90 D6 11 D1 13 90 D6 11	0155 0158 0158 015A 015D 015F 0161 0164 0166	331 VALUE_CHAR: 332 CMPL R 333 BEQLU V 334 MOVB R 335 INCL R 336 BRB V 337 QUAL_CHAR: 338 CMPL R 339 BEQLU Q 340 MOVB R 341 INCL R	3.#8 /ALUE_LOOP 13.#4 /ALUE_LOOP 13.#4 /UAL_LOOP 11.(R2)+	STORE ONLY FIRST 8 CHARACTERS IGNORE THIS CHARACTER STORE CHARACTER INCREMENT CHARACTER COUNT CONTINUE STORE ONLY FIRST 4 CHARACTERS IGNORE THIS CHARACTER STORE CHARACTER INCREMENT CHARACTER COUNT
54 56 3 0000	0000°CF 0000°CF 01BA 0°CF 55 FEB7 01	DE DE 30 E0 31 10 05	016B 016D 016D 0172 0177 017A 0180 0183 0185	345 QUAL_DELIMITER: 346 MOVAL W 346 BSBW T 347 BBS R	WAL_LOOP TSTSAZ_QUAL,R4 TSTSGT_KEYWORD,R6 STSMATCH S.W^TSTSGL_VALID,108 ARSE_ERROR WAL_DISPATCH	GET ADDRESS OF KEYWORD TABLE GET ADDRESS OF STRING TO MATCH FIND TABLE INDEX OF KEYWORD IS THIS A VALID QUALIFIER? NO, NOT IN THIS CONTEXT GO TO QUALIFIER SPECIFIC CODE EXIT

0186 353 0186 355 0186 354 0186 355 QUAL DISPATCH IS A SPECIAL PURPOSE SUBROUTINE THAT CON- 0186 356 SPECIFIC CODE. IT EXISTS AS A SUBROUTINE TO UTILIZE "RE 0186 357 FROM A "CASE" INSTRUCTION INSTEAD OF USING "BRW".	ITAINS QUALIFIER ISB" TO RETURN
0186 356 SPECTFIC CODE. IT EXISTS AS A SUBROUTINE TO UTILIZE "R: 0186 357; FROM A "CASE" INSTRUCTION INSTEAD OF USING "BRW". 0186 359 0186 360 QUAL_DISPATCH: 56 0000 CF DE 0186 361 MOVAL W*TST\$GT_VALUE,R6 GET ADDRESS OF 018B 362 STRING FOR POSE 018B 363 \$CASEB SELECTOR=R5.DISPL=<- DISPATCH TO API	QUALIFIER VALUE
O18B 365 DISPLAY - DISPLAY EACH	SURE CONTROL Y EACH MESSAGE OL ON FOR DTR O RETURN DESIRED FOR DTR IN SECONDS SUNICATIONS LINE SIRED
018D 30 01C1 390 BSBW TSTSCVTU DTB : CONVERT DIGITS	I VALUE TO BINARY VALUE
01CA 394 DISPLAY: 57 26 DO 01CA 395 MOVL #MAX K DISPLAY,R7 DEFINE MAXIMUM 0181 30 01CD 396 BSBW TSTSTVTU DTB CONVERT DIGITS 0000°CF 56 F6 01D0 397 CVTLB R6,W^TSTSGB_DISPLAY UPDATE DISPLAY 05 01D5 398 RSB EXIT	VALUE TO BINARY VALUE
54 0000°CF DE 01D6 401 MOVAL W^TST\$AZ FLOW,R4 : GET ADDRESS OF	KEYWORD TABLE EX OF KEYWORD
0000°CF 55 F6 01E0 404 CYTLB R5, W^TST\$GB_FLOW UPDATE FLOW COL	NTROL FIELD
7E 0E10 8F 3C 01E6 408 MOVZWL #3600,-(SP) : # SECONDS IN 1	QUALIFIER VALUE HOUR

age	10
	44 6

TST	SDI	SP	AR	SE
V04				

- PA PARS	RSE DT	S COMMAND LIN INEQUALIFIE	E R VALUE	D 6 16-SEP-1984 01:25:31 VAX/VMS Macro V04-00 EVALUATIO 5-SEP-1984 00:22:35 [DTSDTR.SRC]DTSPARSE.MAR;	Page	10 (6)
9A 31	01EB 01EF 01F2	409 410 411	MOVZBL BRW	# <max_k_time_da 3600="">,R7; DEFINE MAXIMUM HOUR VALUE TIME; BRANCH TO COMMON CODE</max_k_time_da>		

57 64 8F 008A	9A 31	01EB 409 01EF 410	MOVZBL BRW		; DEFINE MAXIMUM HOUR VALUE BRANCH TO COMMON CODE
7E 3C 1770 8F 007F	9A 3C 31	01F2 411 01F2 412 MINUTES: 01F2 413 01F5 414 01FA 415	MOVZBL MOVZWL BRW	#60,-(SP) # <max_k_time_da 60="">,R7 TIME</max_k_time_da>	PROCESS MINUTES QUALIFIER VALUE
57 80 8F 014D 0000°CF 56	9A 30 6	01FD 417 NAK: 01FD 418 0201 419	MOVZBL BSBW CVTLB RSB	#MAX_K_NAK,R7 TST\$CVTU_DTB R6,W^TST\$GB_NAK	PROCESS NAK QUALIFIER DEFINE MAXIMUM VALUE CONVERT DIGITS TO BINARY VALUE UPDATE NAK CONTROL EXIT
0000°CF	94	020A 422 020A 423 020A 424 020A 425 020E 426 020F 427	ASSUME CLRB RSB	VAL_K_BACK_NO,EQ,O W^TST\$GB_BACK	PROCESS NOBACK QUALIFIER UPDATE BACK PRESSURE CONTROL VALUE EXIT
06 53 03 FE23 03		020F 428 NODENAME 020F 429 020F 430 020F 431 0212 432 0214 433	CMPL BLEQU BRW PUSHR	R3.#6 10\$ PARSE_ERROR #^M <r0,r1></r0,r1>	PROCESS NODENAME QUALIFIER VALUE A NODENAME OF 0-6 CHARACTERS IS ALLOWED IS STRING TOO LONG? NO. USE ENTERED VALUE YES SAVE RO AND R1 NODENAME IS STORED AS A
0000 ° CF 53 0000 ° CF 53 0001 ° CF	90 28 BA 05	0226 440 0228 441	MOVB MOVC3 POPR RSB	R3.W^TST\$GT_NODENAME R3.W^TST\$GT_VALUE,- W^TST\$GT_NODENAME+1 #^M <r0,rt></r0,rt>	COUNTED ASCII STRING STORE LENGTH OF STRING STORE STRING NOTE RO - R5 ARE DESTROYED! RESTORE RO AND R1 EXIT
0000°CF	94 05	0229 445 022D 446 022E 447	ASSUME CLRB RSB	WAL_K_DISP_NO,EQ.O W^TSTEGB_DISPLAY	PROCESS NODISPLAY QUALIFIER UPDATE DISPLAY VALUE EXIT
0000°CF	94 05	022E 448 NOFLOW: 022E 449 022E 450 0232 451	ASSUME CLRB RSB	VAL_K_FLOW_NO.EQ.O W^TST\$GB_FCOW	PROCESS NOFLOW QUALIFIER UPDATE FLOW CONTROL VALUE EXIT
0000°CF	94 05	0233 455	ASSUME CLRB RSB	VAL K NAK NO,EQ,O	PROCESS NONAK QUALIFIER UPDATE NAK CONTROL VALUE EXIT
0000°CF	94 05	0238 460 0230 461	ASSUME CLRB RSB	VAL K PRIN NO EQ.O	PROCESS NOPRINT QUALIFIER UDPATE PRINT VALUE EXIT
0000°CF			I: ASSUME CLRB	VAL_K_RETU_NO,EQ,O W^TST\$GB_RETURN	PROCESS NORETURN QUALIFIER UPDATE RETURN VALUE

	E 6				
TSTSDTSPARSE V04-000	- PARSE DTS COMMAND LINE PARSE ROUTINE QUALIFIER VALUE EVALUAT	16-SEP-1984 01:25:31 10 5-SEP-1984 00:22:35	VAX/VMS Macro VO4-00 LDTSDTR.SRCJDTSPARSE.MAR;1	Page 11 (6)	

V

				r MN 3	C HOOTING	AOVETLIE!	ANEUE	EANFOWLID 3-251-1404 00:5	E. 33 EUTSUTH. SHESUTSPANSE. MAN; T
				05	0241 466		RSB		EXIT
		000	00°C1	94	0242 468 0242 469 0242 470 0246 471	NOSTATIS	STICS: ASSUME CLRB RSB	VAL K STAT NO.EQ.0	PROCESS NOSTATISTICS QUALIFIER UPDATE STATISTICS VALUE EXIT
00	00°CF	8	80 81	90	0247 473 0247 473 0247 474 0240 473	PRINT:	MOVB RSB	#VAL_K_PRIN_YES,W^TST\$GB	PROCESS PRINT QUALIFIER PRINT; UPDATE PRINT VALUE EXIT
	54		000 CI	30	024E 477 024E 478 0253 479 0256 480	RETURN:	MOVAL BSBW INCL	W^TST\$AZ_RETURN,R4 TST\$MATCH R5 R5,W^TST\$GB_RETURN	PROCESS RETURN QUALIFIER VALUE GET ADDRESS OF KEYWORD TABLE FIND TABLE INDEX OF KEYWORD
	0000	Cr	7	05	025D 48		CVTLB RSB	K2'M.121208 KEINW	UPDATE RETURN USERDATA VALUE
	0000	57 01 57 'CF	01 01 01 00 00 5	8 00 91 13 13 5 50 6 F6	025E 483 025E 485 025E 485 0261 486 0264 487 0266 488 0269 489 026C 490	RQUEUE:	MOVL CMPB BEQLU MOVL BSBU CVTLB RSB	#MAX K RQUEUE DA,R7 R10, PVAL_K_TEST_DATA 108 #MAX K RQUEUE_IN,R7 TSTSCVTU DTB R6,W^TST\$GB_RQUEUE	PROCESS RQUEUE QUALIFIER VALUE DEFINE MAXIMUM VALUE FOR DATA TEST IS IT A DATA TEST? BRANCH IF YES NO. DEFINE MAX VALUE FOR INT TEST CONVERT DIGITS TO BINARY VALUE UPDATE FLOW CONTROL VALUE EXIT
57	000	7E 57E4	0 81	D0	0272 494 0272 494 0272 494 0275 495 027C 496		MOVL	#1(SP) #MAX_K_TIME_DA,R7	PROCESS SECONDS QUALIFIER VALUE # SECONDS IN 1 SECOND DEFINE MAXIMUM SECOND VALUE COMMON CODE
0000	°CF	8E	00D2	30 65 05	027C 497 027F 498 0285 499		BSBW MULL3 RSB	TSTSCVTU_DTB R6,(SP)+,W^TSTSGL_SECONDS	CONVERT DIGITS TO BINARY VALUE : CALCULATE NUMBER OF SECONDS EXIT
	57		00 81 03 01 00Bt	30 91 30 30 30 6 7	0286 501 0286 503 028B 503 028E 504 0290 505 0293 506	SIZE: 108:	MOVZUL CMPB BEQLU MOVL BSBW CVTLW RSB	#MAX K SIZE DA,R7 R10, #VAL_K_TEST_DATA 10\$ #MAX K SIZE IN,R7 TSTSCVTU DTB R6,W^!ST\$GW_SIZE	PROCESS SIZE QUALIFIER VALUE DEFINE MAXIMUM VALUE FOR DATA TEST IS IT A DATA TEST? BRANCH IF YES NO, DEFINE MAX VALUE FOR INT TEST CONVERT DIGITS TO BINARY VALUE UPDATE MESSAGE SIZE EXIT
57	0000		00 81 00A1 50	F 00	029¢ 511	SPEED:	MOVL BSBW MOVL RSB	#MAX K SPEED,R7 TST\$CVTU_DTB R6,W^TST\$GL_SPEED	PROCESS SPEED QUALIFIER VALUE DEFINE MAXIMUM VALUE CONVERT DIGITS TO BINARY VALUE UPDATE BAUD RATE EXIT
	0000	57 01 57	0000	7 50	02A6 51 02AB 51 02AC 51 02AC 51 02AC 51 02AF 51 02B2 51 02B4 520 02B7 52	SQUEUE:	MOVL CMPB BEQLU MOVL BSBW CVTLB	#MAX K SQUEUE DA,R7 R10, #VXL_K_TEST_DATA 108 #MAX K SQUEUE_IN,R7 TSTSCVTU DTB R6,W^TSTSGB_SQUEUE	PROCESS SQUEUE QUALIFIER DEFINE MAXIMUM VALUE FOR DATA TEST IS IT A DATA TEST? BRANCH IF YES NO, DEFINE MAX VALUE FOR INT TEST CONVERT DIGITS TO BINARY VALUE UPDATE DIS QUEUE COUNT
		0.0			300				

PA	PAI	RSE DTS	COMP	AND LINE	EVALUATIO	16-SEP-1984 5-SEP-1984	01:25:31 00:22:35	VAX/VMS Macro VO4-00 [DISDIR.SRC]DISPARSE.MAR; 1	Page	12 (6)
0	5	02BF	\$23	RSB			: EXIT			
		0250	353	STATISTICS.			. PB00	ESC STATISTICS OHAL TELEP		

			05	02BF	523 524 525		RSB		; EXIT
0000	O'CF	01	90 05	02C0 02C5	\$25 \$26 \$27	STATIST	ICS: MOVB RSB	#VAL_K_STAT_YES,W^TST\$GB	PROCESS STATISTICS QUALIFIER STATISTICS VALUE EXIT
				02C6 02C6 02C6 02C6	530 531 533 534	TYPE:	\$CASEB	SELECTOR=R10,DISPL=<- 10\$- 20\$- 30\$- 40\$-	PROCESS TYPE QUALIFIER VALUE TEST: CONNECT TEST DATA TEST DISCONNECT TEST INTERRUPT TEST
54	0000	*CF	DE 11	0505	233		MOVAL	WATSTSAZ_TYPE_MI,R4	GET ADDRESS OF KEYWORD TABLE
54	0000	CF	DE	0207	23/ 238	105:	HOVAL	508 WATSTSAZ_TYPE_CO,R4	GET ADDRESS OF KEYWORD TABLE
54	0000		DE	05E	239 540	205:	BRB	508 WATSTSAZ_TYPE_DA,R4	; BRANCH TO COMMON CODE ; GET ADDRESS OF KEYWORD TABLE
54	0000		DE	02E5	539 540 541 542 543	308:	BRB	508 WATSTSAZ_TYPE_DI,R4	BRANCH TO COMMON CODE GET ADDRESS OF KEYWORD TABLE
54	0000		DE 11 DE 30 F6	02EC 02EE 02F3	544	408: 508:	BRB	SOS WATSTSAZ TYPE_IN,R4 TSTSMATCH	; BRANCH TO COMMON CODE ; GET ADDRESS OF KEYWORD TABLE
000	0°CF	03E 55	F 6 05	02F6 02FB	544 545 546 547)UB:	BSBW CVTLB RSB	R5,W^TST\$GB_TYPE	; FIND TABLE INDEX OF KEYWORD ; UPDATE MESSAGE TYPE ; EXIT

- 6 - PARSE DTS COMMAND LINE TSTSNEXTCHAR - EXAMINE NEXT CHARACTER 13 (7) VAX/VMS Macro VO4-00 [DTSDTR.SRC]DTSPARSE.MAR; 1 .SBTTL TST\$NEXTCHAR - EXAMINE NEXT CHARACTER .PSECT TST\$CODE NOWRT 000002F FUNCTIONAL DESCRIPTION:

> TST\$NEXTCHAR ATTEMPTS TO EXAMINE THE NEXT CHARACTER IN THE BUFFER. IF THE END OF THE BUFFER HAS BEEN REACHED, TST\$NEXTCHAR SIGNALS END OF LINE CONDITION; OTHERWISE THE NEXT CHARACTER FOUND IS RETURNED ALONG WITH A VALUE INDICATING WHAT TYPE OF CHARACTER IT IS.

CALLING SEQUENCE:

BSB/JSB TST\$NEXTCHAR

INPUT PARAMETERS:

THE ADDRESS OF THE NEXT CHARACTER IN THE BUFFER THE ADDRESS OF THE END OF THE BUFFER + 1

IMPLICIT INPUTS:

NONE

OUTPUT PARAMETERS:

RESULT WHERE: RESULT WHERE:

0 = END OF LINE OR CHARACTER IS AN EXCLAMATION OR DASH

1 = CHARACTER IS A SLASH

2 = CHARACTER IS AN EQUAL SIGN OR COLON

3 = CHARACTER IS A SPACE OR TAB

4 = CHARACTER IS NONE OF THE ABOVE

THE CHARACTER EXAMINED (0 OR "NULL" IF END OF LINE)

UPDATED NEXT CHARACTER POINTER

IMPLICIT OUTPUTS:

NONE

COMPLETION CODES:

NONE

SIDE EFFECTS:

NONE

5889012345555960123460605 TST\$NEXTCHAR:: D4 CLRL R1 CLRL RO = 0R8,R9 CMPL BEQLU MOVZBL (R8) + R1

59

51

CONTROL POINT INITIALIZE RETURN VALUE SET R1 TO 'NULL'

END OF COMMAND LINE? GET NEXT CHARACTER

		TSTS	NEXTCH/	S COMMAND LIN AR - EXAMINE	NEXT CHA	RACTER 5-SE	P-1984 01:25: P-1984 00:22:	31 YAX/VMS Macro V04-00 35 [DTSDTR.SRC]DTSPARSE.MAR;1	Page	14
21	51	21	0308	606	CMPB	R1_#^A\!\	: 1	S IT AN EXCLAMATION POINT?		
20	51 21	91	0300 0310 0313	606 607 608 609	CMPB BEQLU RO = 1	R1 #^A\-\	i i	ES IGNORE REST OF LINE S IT A DASH? ES, IGNORE REST OF LINE		
2F	50 51 1A	96 91 13	0312 0314 0317	611 612 613	INCL CMPB BEQLU	RO R1 10\$: 1:	NCREMENT RETURN VALUE S IT A SLASH? ES		
30	50 51	D6 91 13 91	0319 031B	614 ; **** 615 616	RO = 2 INCL CMPB BEQLU	RO R1 #^A\=\ 10\$: 13	NCREMENT RETURN VALUE S IT AN EQUALS_SIGN? ES		
3A	Š1 OE	91	0325 0323 0325	618 619 620 : ****	CMPB BEQLU_	R1 **A\:\	: 1:	S 17 A COLON?		
20	50 51 07	96 91 13 91	0325 0327 032A	621 622 623	INCL CMPB BEQLU	RO R1 10\$		NCREMENT RETURN VALUE S IT A SPACE? ES		
09	51 02	91	032C 032F 0331	624 625 626 : ****	BEQLU	R1 #*X09 10\$; 1:	S IT A TAB? ES		
	50	05	0331	627 628 10\$:	INCL	RO	: []	Y'S NONE OF THE ABOVE		

TST&DTSPARSE V04-000

15 (8) Page

.SBTTL TSTSMATCH - KEYWORD MATCH ROUTINE .PSECT TSTSCODE NOWRT 00000334 0334 0334 0334

FUNCTIONAL DESCRIPTION:

TST\$MATCH SEARCHES THE SPECIFIED KEYWORD TABLE FOR A MATCH WITH THE SPECIFIED KEYWORD STRING. IF A MATCH IS FOUND, THE INDEX OF THE MATCHING TABLE ENTRY IS RETURNED; OTHERWISE CONTROL IS TRANSFERRED TO AN ERROR ROUTINE. THE END OF THE TABLE IS MARKED BY A NULL KEYWORD ENTRY, I.E., A NULL COUNTED ASCII STRING.

CALLING SEQUENCE:

BSB/JSB TST\$MATCH

INPUT PARAMETERS:

R4 R6 ADDRESS OF THE KEYWORD TABLE TO SEARCH ADDRESS OF THE KEYWORD STRING TO MATCH AGAINST THE TABLE

IMPLICIT INPUTS:

NONE

OUTPUT PARAMETERS:

THE INDEX OF THE MATCHING TABLE ENTRY IF A MATCH IS FOUND; OTHERWISE UNDEFINED.

IMPLICIT OUTPUTS:

NONE

COMPLETION CODES:

NONE

BRW

SIDE EFFECTS:

CONTROL IS TRANSFERRED TO PARSE_ERROR IF AN ERROR IS DETECTED.

50 84 90 0338 677 1 11 13 0338 678 66 64 50 29 0330 679 08 13 0341 680 54 51 50 C1 0343 681 55 06 0347 682 ED 11 0349 683 1F BA 0348 684 2			1 F	88 04	0334 0336	674 675 676	TSTSA
54 51 50 C1 0343 681 55 D6 0347 682 ED 11 0349 683 1F BA 034B 684 2		50	84	90	0338	677	105:
55 D6 0347 682 ED 11 0349 683 1F BA 034B 684 2 05 034D 685	66	64	50	29	0330	679	
05 034D 685	54	51	50 55	c1 06	0343	681 682	
			ED 1F	11 8A	0349 034B	683 684	208:
			FCE9	31	034E	686	30\$:

TSTSMA	TCH::	
5	PUSHR	#^M <ro,r1,r2,r3,r4></ro,r1,r2,r3,r4>
108:	MOVB	(R4)+,R0
9	BEQLU CMPC3	RO, (R4), (R6)
1	ADDL3	RO, R1, R4
3	INCL BRB	R5 10\$
208:	POPR	#^M <ro,r1,r2,r3,r4></ro,r1,r2,r3,r4>

PARSE_ERROR

CONTROL POINT SAVE REGISTERS INITIALIZE RETURN VALUE
GET # OF SIGNIFICANT CHARACTERS
END OF TABLE IF ZERO
DO STRINGS MATCH? SET POINTER TO NEXT ENTRY INCREMENT TABLE INDEX TRY AGAIN RESTORE REGISTERS BRANCH TO ERROR ROUTINE

0 91 1A

52 08 CHARACTERS.

ADDL2 CMPB BGTRU

MOVZBL

R3.R2 R3.#8 20\$ ADD STRING LENGTH TO POINTER IS STRING TOO LONG?

SET-UP DIGIT PLACE VALUE

		- PA	RSE DTS	COM	MAND LI	NE UNSIGNED	K 6 DECIMAL	16-SEP-1984 5-SEP-1984	01:25:31 00:22:3	1 VAX/VMS Macro VO4-00 P 5 EDTSDTR.SRCJDTSPARSE.MAR;1	age	17
55 55 65 56 54 57 57	6205245A361	D4A221A40451A51	0361 0366 03669 03662 0377 0377 0377 0377 0378 0383	745 746 747 748 755 755 755 755 755 755 758		CLRL MOVZBL SUBB2 CMPB BGTRU MULL2 ADDL2 MULL2 SOBGTR CMPL BGTRU RSB BRW • END	R6 -(R2),R5 #230,R5 R5,89 20\$ R4,R5 R5,R6 #10,R4 R3,10\$ R6,R7 20\$	OR	COP IS YES MUL ADI MUL ANO IS	LTIPLY DIGIT BY ITS PLACE VALUE D THIS TO THE TOTAL LTIPLY PLACE VALUE BY 10 OTHER DIGIT TO CONVERT? CONVERTED VALUE TOO LARGE?		

TSTSDTSPARSE V04-000

TST\$DTSPARSE Symbol table	- PARSE DTS COMMAND LINE	L 6	16-SEP-1984 01:25:31 VAX/VMS Macro V04-00 5-SEP-1984 00:22:35 [DTSDTR.SRC]DTSPARSE.MAR	Page 1	18
\$\$COUNT	PARAMETER PARAM_CHAR PARAM_DELIMITER PARAM_LOOP PARSE_ERROR PRINT QUAL QUALIFIER QUAL_DISPATCH QUAL_LOOP QUAL_REEXAMINE QUAL_VALUE REEXAMINE_CHAR RETURN RQUEUE SECONDS SIZ = 02 SPACE_OR_TAB 02 SPEED 02 SQUEUE TST\$AZ_FLOW TST\$AZ_PARAM TST\$AZ_PARAM TST\$AZ_TYPE_DA TST\$AZ_TYPE_DA TST\$AZ_TYPE_DA TST\$AZ_TYPE_IN TST\$AZ_TYPE_IN TST\$AZ_TYPE_MI TST\$AZ_TYPE_MI TST\$AZ_TYPE_MI TST\$GB_BLSPLAY TST\$GB_PLSPLAY TST\$GB_PLSPLAY TST\$GB_RETURN TST\$GB_TSTAT TSTAT TST\$GB_TSTAT TSTAT T	000000000 RG 00000005F R 00000005F R 00000005F R 000000018 R 00000011C R 00000016D R 000000186 R 00000012F R 00000013D R 00000013D R 0000002F R 0000002F R 0000002F R 0000002F R 0000002F R 000000000000000000000000000000000000	O2		

The working set limit was 1350 pages.
29598 bytes (58 pages) of virtual memory were used to buffer the intermediate code.
There were 20 pages of symbol table space allocated to hold 200 non-local and 24 local symbols.
820 source lines were read in Pass 1, producing 21 object records in Pass 2.
23 pages of virtual memory were used to define 19 macros.

! Macro Library statistics !

Macro Library name Macros defined

\$255\$DUA28:[DTSDTR.OBJ]DTSDTR.MLB;1

\$255\$DUA28:[SYSLIB]STARLET.MLB;2

TOTALS (all libraries)

6

223 GETS were required to define 12 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:DTSPARSE/OBJ=OBJ\$:DTSPARSE MSRC\$:DTPREFIX/UPDATE=(ENH\$:DTPREFIX)+MSRC\$:DTSPARSE/UPDATE=(ENH\$:DTSPARSE)

0123 AH-BT13A-SE

DIGITAL EQUIPMENT CORPORATION CONFIDENTIAL AND PROPRIETARY

